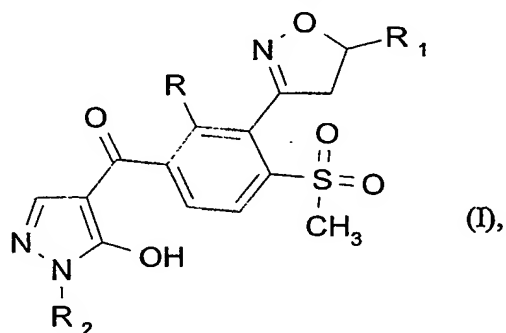


We claim:

1. A herbicidal composition comprising a mixture of
  - a) at least one soil-applied herbicideand
  - b) a synergistically effective amount of a lipophilic additive comprising at least one hydrocarbon fluid consisting of a paraffin oil derived from the refined fraction of petroleum oil with a distillation range at 10mm Hg of about 190 °C to 280 °C and with a carbon number distribution from about C13 to about C55.
2. The herbicidal composition of claim 1 wherein 30 to 100 wt.% of the carbon structures of the paraffin oils have a carbon number distribution in the range of C22 to C50
3. The herbicidal composition of claim 1 wherein the hydrocarbon fluid for use as the lipophilic additive of the present invention comprises a premixed refined paraffin oil composition containing, in addition to the refined paraffin oil, one or more surface active agents.
4. The herbicidal composition of claim 1 wherein the ratio (wt/wt) of a) to b) is 100:1 to 0.005 :1.
5. The herbicidal composition of claim 1 wherein the soil-applied herbicide comprises at least one member selected from the group consisting of acetamides, HPPD-inhibitors, triazines, pendimethalin, prosulfocarb, amicarbazone, triasulfuron and sulfentrazone
6. The herbicidal composition of claim 5 wherein the acetamide comprises at least one member selected from the group consisting of diphenamid, napropamide, naproanilide, acetochlor, alachlor, butachlor, dimethachlor, dimethenamid, dimethenamid-P, fentrazamide, KIH-485, metazachlor, metolachlor, pethoxamid, pretilachlor, propachlor, propisochlor, S-metolachlor, thenylchlor, flufenacet and mefenacet.

7. The herbicidal composition of claim 6 wherein the acetamide comprises a mixture of the (S) and (R) isomers of metolachlor in the ratio of 50-100% (S) to 50-0% (R).

8. The herbicidal composition of claim 5 wherein the HPPD-inhibitor comprises at least one member selected from the group consisting of mesotrione, isoxaflutole, 2-[2-chloro-3-(2,2,2-trifluoroethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; 2-[2-chloro-3-(5-cyanomethylisoxazolin-3-yl)-4-ethylsulfonylbenzoyl]cyclohexane-1,3-dione; 2-[2-chloro-4-methylsulfonyl-3-[tetrahydrofuran-2-yl]methoxymethyl]benzoyl} cyclohexane-1,3-dione; 2-[2-chloro-3-(methoxyethoxyethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; and 2-[2-chloro-3-(1,1,2,2,2-pentafluoroethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; and a compound of formula I



wherein R is C<sub>1</sub>-C<sub>2</sub>alkyl or chlorine, R<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl and R<sub>2</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl.

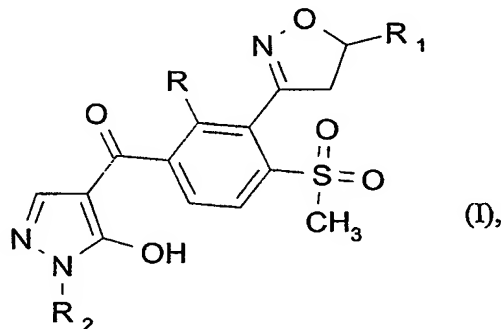
9. The herbicidal composition of claim 1 comprising two or more soil-applied herbicides.

10. The herbicidal composition of claim 9 wherein the soil-applied herbicide comprises a mixture of acetamide and triazine herbicides.

11. The herbicidal composition of claim 10 wherein the acetamide herbicide comprises a mixture of the (S) and (R) isomers of metolachlor in the ratio of 50-100% (S) to 50-0% (R) and the triazine herbicide comprises at least one member selected from the group consisting of atrazine and terbuthylazine.

12. The herbicidal composition of claim 9 wherein the soil-applied herbicide comprises a mixture of acetamide and HPPD-inhibiting herbicides.

13. The herbicidal composition of claim 12 wherein the acetamide herbicide comprises a mixture of the (S) and (R) isomers of metolachlor in the ratio of 50-100% (S) to 50-0% (R) and the HPPD-inhibiting herbicide comprises at least one member selected from the group consisting of mesotrione, isoxaflutole, 2-[2-chloro-3-(2,2,2-trifluoroethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; 2-[2-chloro-3-(5-cyanomethylisoxazolin-3-yl)-4-ethylsulfonylbenzoyl]cyclohexane-1,3-dione; 2-[2-chloro-4-methylsulfonyl-3-[tetrahydrofuran-2-yl]methoxymethyl]benzoyl]cyclohexane-1,3-dione; 2-[2-chloro-3-(methoxyethoxyethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; and 2-[2-chloro-3-(1,1,2,2,2-pentafluoroethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; and a compound of formula I

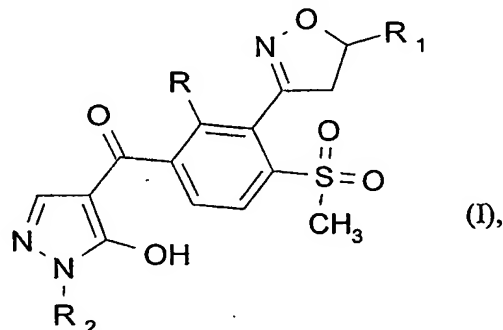


wherein R is C<sub>1</sub>-C<sub>2</sub>alkyl or chlorine, R<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl and R<sub>2</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl.

14. The herbicidal composition of claim 9 wherein the soil-applied herbicide comprises a mixture of acetamide, triazine and HPPD-inhibiting herbicides.

15. The herbicidal composition of claim 14 wherein the acetamide herbicide comprises a mixture of the (S) and (R) isomers of metolachlor in the ratio of 50-100% (S) to 50-0% (R), the triazine herbicide comprises at least one member selected from the group consisting of atrazine and terbuthylazine and the HPPD-inhibiting herbicide comprises at least one member selected from the group consisting of mesotrione, isoxaflutole, 2-[2-chloro-3-(2,2,2-trifluoroethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; 2-[2-chloro-3-(5-cyanomethylisoxazolin-3-yl)-4-ethylsulfonylbenzoyl]cyclohexane-1,3-dione; 2-[2-chloro-4-

methylsulfonyl-3-[tetrahydrofuran-2-yl]methoxymethyl]benzoyl}cyclohexane-1,3-dione; 2-[2-chloro-3-(methoxyethoxyethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; and 2-[2-chloro-3-(1,1,2,2,2-pentafluoroethoxymethyl)-4-methylsulfonylbenzoyl]cyclohexane-1,3-dione; and a compound of formula I



wherein R is C<sub>1</sub>-C<sub>2</sub>alkyl or chlorine, R<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl and R<sub>2</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl.

16. The herbicidal composition of claim 1 further comprising a safener.
17. A method of controlling undesired plant growth in the presence of cultivated plants, which comprises treating the locus thereof with a herbicidally effective amount of the herbicidal composition according to claim 1.
18. The method according to claim 17, wherein the cultivated plants are selected from the group consisting of cereals, rape, sugar beet, sugar cane, rice, maize, plantation crops, soybeans and cotton.
19. The method of claim 17 wherein the cultivated plants comprise transgenic plants or herbicidally tolerant plants created by conventional breeding.
20. The method of claim 17, which further comprises treating the cultivated plants, plant parts, seed or the locus thereof with at least one member selected from the group consisting of co-herbicides, plant growth regulants, fungicides and insecticides.

21. The method of claim 20, which comprises treating the cultivated plants, plant parts, seed or the locus thereof at separate times with the herbicidal composition and the at least one co-herbicide, plant growth regulant, fungicide and insecticide.

22. The method of claim 17, which further comprises treating the cultivated plants, plant parts, seed or the locus thereof with a safener.

23. The method of claim 22, which comprises treating the cultivated plants, plant parts, seed or the locus thereof at separate times with the herbicidal composition and the safener.